

PROSPECTUS

NORTHEASTERN BEECH UTILIZATION SERIES

To be prepared by Northeastern Technical Committee on Utilization
of Beech, and published by Northeastern Forest Experiment Station
1949-51

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New York State College of Forestry

The Pennsylvania State College

Pennsylvania Department of Forests and Waters

West Virginia University

Northeastern Forest Experiment Station

Forest Products Laboratory

NOTES FOR WRITERS

1. For Whom We Write

This series will be written primarily for the man on the ground: the dirt forester confronted with the problem of marking and marketing beech, the owner of forest land, and the men in the wood-using industries.

2. Objective

Our aim will be to provide practical, down-to-earth information on the management and utilization of beech. We will draw on the results of scientific studies, both in the United States and in Europe, but we will present these results in the form of simple, easily understood facts and instructions. We will also draw on the knowledge accumulated by our own and other wood-using industries. The basic information to be presented is:

Much more beech should be cut from the timber stands of the Northeast than is currently being utilized.

American beech is an important component of Northeastern timber stands. Its quality can be improved and competition with more valuable species can be reduced by forest management.

There is a considerable variation in the quality of beech now present in the stands, tracing back in most cases to origin of the trees and the conditions under which they have grown. Beech has certain mechanical qualities that adapt it for special uses.

There are a great many possible uses for beech. But present markets for beech are spotty. In some localities industries are using it to good advantage but over the majority of its range it is not wanted by the industry.

Beech basically suited for various uses can be recognized in the woods and logged in such a way that the various qualities can be cut into suitable sizes and segregated for the industries that can use them to best advantage.

Methods have been developed to process and handle beech so as to reduce degrade and to increase its utility in various industries. The best current information on these methods, including seasoning, machining, pulping, preservation, etc., will be presented.

Various wood-using industries can use greater quantities of beech, and still maintain or increase the quality of their product. Specific ways and places in which this can be done will be pointed out.

3. Publishing Procedures

Manuscripts of papers to be included in this series will be submitted to the Director of the Northeastern Forest Experiment Station, 102 Motors Avenue, Upper Darby, Pa. He will route them to the Working Committee for technical review and correlation, to the Station Editor for editing, and finally to the Station processing section for publication. The Working Committee and the Editor will consult directly with the author of each paper on any changes or revisions that appear to be desirable.

The goal is to complete the entire series in two years' time, between July 1, 1949 and July 1, 1951. No attempt will be made to schedule the submission or publication of the papers in the order in which they are listed in this prospectus. Each paper will be reviewed, edited and published as promptly as possible after it is received.

4. Manuscript Preparation

Length.--No length is specified in the assignments. The aim is to cover the assigned subject clearly and adequately, without omitting anything important or useful, but also without needless verbiage or detail. Use 2 pages or 20, whatever you need.

Illustrations.--Line sketches, diagrams, and clear reproducible photographs that will add to the text are desired. If possible, sketches and diagrams should be submitted in final form. The Station is not staffed to do very much illustrative work of this kind.

Subheads.--Should be used to guide the reader, not to compensate for deficiencies in the structure of the paper. Subheads should be short, one line only.

Tables.--Should be clear, well set up and meaningful--not merely supporting data.

Footnotes.--Avoid footnotes. Put the necessary "footnote" material in the text, skip the unnecessary stuff.

Literature citations.--Literature citations and references should be grouped alphabetically, by author's name, at the end of the manuscript.

Acknowledgments.--(to persons who helped in preparing manuscript or furnishing data, cooperating persons or agencies, etc.) should also be made at the end of the article.

5. Format

In general, the style rules of the Government Printing Office will be followed. For your use, we are enclosing with this Prospectus a copy of the Northeastern Forest Experiment Station's style manual, which contains most of the information you will need in regard to format and style rules. A copy of the Station's handbook on presentation of tabular data is available on request.

Number of copies.--The ribbon copy and at least two carbon copies should be submitted to the Committee, through the Director of the Northeastern Forest Experiment Station.

Title page.--The first page of the manuscript should contain the title, in caps and lower case, flush on the left, and directly below it the name of the writer and his agency or connection, as he wants it to appear in the publication.

Spacing.--All material should be double-spaced; single-spacing is not desired anywhere.

Paragraphing.--Do not break a paragraph at the end of a page. This does not mean one paragraph to a page--several paragraphs may be put on the same page so long as the last one does not run over.

Margins.--Margins should be set so that lines average 66 characters and spaces. Do not crowd the pages.

Footnotes.--If any, should be inserted immediately following the line in which the reference occurs, divided from the text by rules.

Figure legends.--Should be written on separate pages. Try to make charts and tables self-contained, and avoid, whenever possible, the often unnecessary "(see Fig. 3)" in the text.

Underscoring.--Indicates italics and should be used infrequently and advisedly. Titles of books are underscored.

6. Material submitted for publication in this series should not be published or offered for publication through other channels until after it has been published in this beech series.

OUTLINE

Entries in this outline are merely topics, not necessarily the titles of the papers. The titles that authors use on their manuscripts should be short, accurate, and attractive. Changes may be made in them to conform to typographic style yet to be chosen.

1. Beech Availability and Supply (Northeastern Forest Experiment Station)

Best available current estimates of the amount of beech available in the Northeast, by States and important subregions, such as the Adirondacks, the Allegheny Plateau, etc. Best available information on the current drain on this supply.

2. Possibilities of Managing Beech (Svend O. Heiberg, N. Y. State College of Forestry, and co-authors)

Silvical characteristics, marking for increased quality and increment, reproduction. Suggestions as to management of beech in various stands and on various sites.

3. Quality of Beech as Related to Growth, Mechanical Properties of Beech (Benson H. Paul and John Drow, Forest Products Laboratory)

Conditions that produce best beech for various uses, specific gravity as index to beech quality, mechanical properties of beech.

4. Present Markets and Uses for Beech (Northeastern Forest Experiment Station)

Use of beech in various wood-using industries, general summary of information to be contained in later papers for each industry. Over-all summary of current beech markets in the Northeast, and possible ways of extending these markets.

5. Production Specifications and Logging Methods (Northeastern Forest Experiment Station)

Logging methods for stands containing beech, specifications for beech logs and bolts for various uses, cutting beech stems into logs and bolts for greatest utility and value. Debarking of beech for certain uses.

6. Storage of Beech Logs and Bolts (Robert Zabel, N. Y. State College of Forestry and Ted Scheffer, Forest Products Laboratory)

Methods of storage of beech in the round to minimize checking, stain, and decay. Utility and application of end coatings)

7. Milling of Beech (Northeastern Forest Experiment Station)

Methods of handling beech in saw and bolter mills, utility of each. Sawing beech for greatest quality and utility.

8. Seasoning of Beech (Gregory Baker, University of Maine)

Special requirements of this species in air-seasoning and kiln-drying. Instructions for seasoning various lengths and thickness for minimum degrade. Chemical helps in seasoning.

9. Machining of Beech (S. H. McIntire, Vermont Bureau of Industrial Research)

Special requirements of this species in routing, turning, shaping, and planing. Best knife angles, bevels, pressures, feeds, speeds, etc., to obtain desired quality of product.

10. Beech for Veneer and Plywood (Forest Products Laboratory)

Heating, cutting, grading, and drying of veneer from this species.

Utility of veneer. Special requirements for gluing with various adhesives, and utility of each type.

11. Laminating Beech (Forest Products Laboratory)

Utility of this species for laminating. Preparing, laying up and pressure needed for various assemblies. Adhesives to be used. Utility of product.

12. Pulping and Defiberization of Beech (Fred O'Neill, N. Y. State College of Forestry and John McGovern, Forest Products Laboratory)

Processes adaptable, special requirements of beech in various pulping processes. Utility of pulps produced.

13. Chemical Utilization of Beech (Dr. A. J. Stamm, Forest Products Laboratory)

Utility of this species for resin and compression treatments, drawing on European as well as American experience, treatment methods, hydrolysis saccharification of beech.

14. Preservative Treatment of Beech (A. H. Bishop, New York State College of Forestry and Henry Hicock, Conn. Agricultural Experiment Station)

Preservatives and processes recommended. Special precautions to be used. Utility of product.

15. Beech for Flooring (Emil Lefkof, Pennsylvania Department of Forests and Waters)

Utility of this species for flooring, special precautions necessary in manufacture, markets for beech flooring.

16. Beech for Furniture (J. Harry Rich, University of Massachusetts)

Present use of beech in furniture industry, possibilities of expansion, special methods of handling and processing, and particular uses found effective.

17. Beech for Turned Products and Novelties (Northeastern Forest Experiment Station)

Special adaptability of this species for this industry, limitations, methods of manufacture, markets.

18. Bending Beech (Fred Wangaard, Yale University)

Use of beech in bentwood products, instructions for preparation and bending, markets.

19. Rough Construction with Beech on the Farm (Penn State College)

Utility of beech for rough construction, including fence posts. Special methods of cutting, drying, and preserving beech suitable for farm use.

20. Beech for Containers (Dave Cook, N. Y. State Conservation Department)

Utility of beech for containers, including crates, wire-bound and other boxes, and baskets. Methods of handling and processing. Markets.

21. Beech for Mine Timbers (George Marra, West Virginia University)

Present use of beech in the mines, possibilities of expanding such use, instructions for preparing and marketing beech for mine use.

22. Beech for Fuel and Charcoal (New Hampshire Engineering Experiment Station)

Value of beech for fuel and charcoal, present use. Methods of more efficient burning and carbonization on a small scale.

23. Beech for Ties and Tie Sides (Jack Byers, West Virginia University)

Utility of beech for ties, manufacture and marketing beech ties, utility and disposal of tie sides.